WHAT IS CLAIMED IS:

1. An encryption method for encryption target data, comprising steps of:

dividing the encryption target data into encryption target units; and

encrypting each of the encryption target units based on an encryption ratio of actually encrypted data length, within the each of the encryption target units, to entire data length of the each of the encryption target units,

wherein the entire data length of the each of the encryption target units does not change both prior to and subsequent to being encrypted.

2. The encryption method according to Claim 1,

wherein the encryption ratio includes a plurality of different kinds, and

wherein each of the plurality of different kinds of the encryption ratio is applied, in certain order, for encrypting.

3. The encryption method according to Claim 2,

wherein, when a certain kind of the encryption ratio is applied in the certain order, the certain kind of the encryption ratio is repeatedly applied for encrypting, at a certain number of times.

4. The encryption method according to Claim 1,

wherein, when the each of the encryption target units is

encrypted based on the encryption ratio, encryption of the each of the encryption target units starts from an encryption starting point that is located in a certain point within the each of the encryption target units.

5. The encryption method according to Claim 4,

wherein the encryption starting point includes a plurality of different kinds,

wherein a plurality of encryption patterns are generated by combination of the plurality of different kinds of the encryption ratio with the plurality of different kinds of the encryption starting point, and

wherein each of the plurality of encryption patterns is applied, in given order, for encrypting.

6. A data encryption device for encrypting encryption target data, comprising:

an inputting module for inputting the encryption target data;

an encrypting module for encrypting the inputted encryption target data; and

an outputting module for outputting the encrypted encryption target data,

wherein the encrypting module includes:

dividing means for dividing the inputted encryption target data into encryption target units; and

encrypting means for encrypting each of the

encryption target units based on an encryption ratio of actually encrypted data length, within the each of the encryption target units, to entire data length of the each of the encryption target units, wherein the entire data length of the each of the encryption target units does not change both prior to and subsequent to being encrypted.

7. A data encryption program executed in a computer for encrypting encryption target data, comprising steps of:

inputting the encryption target data to the computer;

encrypting the inputted encryption target data; and

outputting the encrypted encryption target data,

wherein the encrypting step includes steps of:

dividing the inputted encryption target data into encryption target units; and

encrypting each of the encryption target units based on an encryption ratio of actually encrypted data length, within the each of the encryption target units, to entire data length of the each of the encryption target units, wherein the entire data length of the each of the encryption target units does not change both prior to and subsequent to being encrypted.

8. A decryption method for decrypting decryption target data based on an encryption rule that is applied to encryption of encryption target data for producing the decryption target data, comprising steps of:

dividing the decryption target data into decryption

14

target units; and

decrypting each of the decryption target units based on a decryption ratio of actually decrypted data length, within the each of the decryption target units, to entire data length of the each of the decryption target units,

wherein the entire data length of the each of the decryption target units does not change both prior to and subsequent to being decrypted.

9. The decryption method according to Claim 8,

wherein the decryption ratio includes a plurality of different kinds, and

wherein each of the plurality of different kinds of the decryption ratio is applied, in certain order, for decrypting.

10. The decryption method according to Claim 9,

wherein, when a certain kind of the decryption ratio is applied in the certain order, the certain kind of the decryption ratio is repeatedly applied for decrypting, at a certain number of times.

11. The decryption method according to Claim 8,

wherein, when the each of the decryption target units is decrypted based on the decryption ratio, decryption of the each of the decryption target units starts from a decryption starting point that is located in a certain point within the each of the decryption target units.

12. The decryption method according to Claim 11,

wherein the decryption starting point includes a plurality of different kinds,

wherein a plurality of decryption patterns are generated by combination of the plurality of different kinds of the decryption ratio with the plurality of different kinds of the decryption starting point, and

wherein each of the plurality of decryption patterns is applied, in given order, for decrypting.

13. A data decryption device for decrypting decryption target data based on an encryption rule that is applied to encryption of encryption target data for producing the decryption target data, comprising:

an inputting module for inputting the decryption target data;

a decrypting module for decrypting the inputted decryption target data; and

an outputting module for outputting the decrypted decryption target data,

wherein the decrypting module includes:

dividing means for dividing the decryption target data into decryption target units; and

decrypting means for decrypting each of the decryption target units based on a decryption ratio of actually decrypted data length, within the each of the decryption target

units, to entire data length of the each of the decryption target units, wherein the entire data length of the each of the decryption target units does not change both prior to and subsequent to being decrypted.

14. A data decryption program executed in a computer for decrypting decryption target data based on an encryption rule that is applied to encryption of encryption target data for producing the decryption target data, comprising steps of:

inputting the decryption target data to the computer;

decrypting the inputted decryption target data; and

outputting the decrypted decryption target data,

wherein the decrypting step includes steps of:

dividing the inputted decryption target data into decryption target units; and

decrypting each of the decryption target units based on a decryption ratio of actually decrypted data length, within the each of the decryption target units, to entire data length of the each of the decryption target units, wherein the entire data length of the each of the decryption target units does not change both prior to and subsequent to being decrypted.